

METHOD AND APPARATUS FOR THE RAPID EVALUATION  
OF A PLURALITY OF MATERIALS OR SAMPLES

ABSTRACT OF THE DISCLOSURE

[0067] An apparatus for the rapid evaluation of a plurality of materials or samples including a plurality of crystals operable for receiving an oscillating potential and oscillating, the plurality of crystals arranged in an array. The apparatus also including a plurality of oscillation devices operable for generating the oscillating potential, the plurality of oscillation devices arranged in an array. The apparatus further including means for measuring an output parameter each of the plurality of crystals. The plurality of crystals are remotely coupled to the plurality of oscillation devices such that the plurality of crystals are exposed to a first operating environment and the plurality of oscillation devices are exposed to a second operating environment. A method for enhancing the stability and the selectivity of each of a plurality of sensors of an array of sensors including modulating each of the plurality of sensors of the array of sensors with respect to a predetermined parameter. Each of the plurality of sensors of the array of sensors including a material that is sensitive to a given environment such that when the sensor is exposed to the given environment a property of the material will change, measurably changing an output parameter of the sensor. The degree of change in the output parameter is correlated to the degree to which the given environment is present. The apparatus and method of the present invention finding applicability in a variety of combinatorial chemistry applications.